

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for monitoring productivity, the method comprising:  
collecting data from a plurality of production sources;  
5 storing the data in one or more databases; and  
determining system productivity values.
2. The method of claim 1, wherein the data collected comprises company data associated with one or more companies.
3. The method of claim 1, wherein the data collected comprises customer data  
10 associated with one or more customers.
4. The method of claim 1, wherein the data collected comprises worker data associated with one or more workers.
5. The method of claim 1, wherein the data collected comprises component vendor data associated with one or more vendors.
- 15 6. The method of claim 1, wherein the data collected is associated with one or more products being produced.
7. The method of claim 6, wherein the data associated with one or more products being produced further comprises components required to produce the product.
8. The method of claim 7, wherein the data associated with one or more products  
20 being produced further comprises the cost of components required to produce the product.
9. The method of claim 8, wherein the one or more product items is produced by one or more individual jobs.
10. The method of claim 9, wherein the one or more individual jobs further comprise one or more production jobs and one or more non-production jobs.
- 25 11. The method of claim 10, wherein the data collected further comprises production effort related to the production jobs and non-production jobs.

12. The method of claim 11, wherein the data collected further comprises a worker wage.

13. The method of claim 11, wherein the data collected further comprises a period of time worked on one or more production or non-production jobs.

5 14. The method of claim 13, wherein the data collected further comprises a plurality of user-specified parameters.

15. The method of claim 14, wherein the user-specified parameters comprise a delivery safety margin.

10 16. The method of claim 14, wherein the user-specified parameters comprise a hidden cost component.

17. The method of claim 14, wherein the user-specified parameters comprise an overhead expense.

18. The method of claim 14, wherein the user-specified parameters comprise a target profit.

15 19. The method of claim 14, wherein the user-specified parameters comprise a foreign currency exchange rate.

20. The method of claim 14, wherein the user-specified parameters comprise a worker incentive value.

20 21. The method of claim 12, wherein the system productivity values comprise a worker productivity value.

22. The method of claim 21, wherein the worker productivity value is derived as a function of actual labor expended and expected labor expended on one or more production jobs.

25 23. The method of claim 22, wherein expected labor expended is determined as an average of all worker time expended in performing a production job over a relevant period of time.

24. The method of claim 21, wherein the system productivity values comprise a worker absenteeism ratio.

25. The method of claim 21, wherein the system productivity values comprise an average efficiency for all workers.

5 26. The method of claim 21, wherein the system productivity values comprise an average labor cost per product produced.

27. The method of claim 21, wherein the system productivity values comprise an average material cost per product produced.

10 28. The method of claim 21, wherein the system productivity values comprise a total cost per product produced.

29. The method of claim 27, wherein the total cost per product produced further comprises costs of labor, materials, overhead, and profit.

30. The method of claim 21, wherein the system productivity values comprise worker salaries.

15 31. The method of claim 30, wherein the worker salaries comprise base wages, overtime, and productivity incentives.

32. The method of claim 31, wherein the productivity incentive is based on a user-specified incentive value.

20 33. The method of claim 21, wherein at least a portion of the data is provided by workers performing production jobs.

34. The method of claim 33, further comprising auditing the data provided by the workers.

35. The method of claim 34, wherein auditing further comprises comparing the quantity of production jobs reported by the workers to an expected quantity of production jobs.

36. The method of claim 35, wherein the expected quantity of production jobs is derived as a function of the quantity of products produced.

37. The method of claim 36, further comprising triggering an alarm if the quantity of reported production jobs differs from the quantity of expected production jobs.

5 38. The method of claim 37, wherein the alarm comprises an icon displayed on a client computer display.

39. The method of claim 21, wherein the system productivity values comprise the rate of usage of supplies.

10 40. The method of claim 39, wherein the rate of usage of supplies is derived from data entered by workers performing production jobs.

41. The method of claim 40, wherein the rate of usage of supplies further comprises determining the rate of usage of one or more supplies per day.

42. The method of claim 41, further comprising determining the minimum quantity of supplies required before additional supplies must be ordered.

15 43. The method of claim 42, wherein the minimum quantity of supplies is determined as a function of the average rate of usage of the supplies per day.

44. The method of claim 42, further comprising determining the quantity of wasted supplies.

20 45. The method of claim 42, wherein the quantity of wasted supplies is determined by comparing the actual quantity of supplies remaining in inventory with the expected quantity remaining based upon production quantities to date.

46. The method of claim 42, further comprising preparing a supply order as a function of an average delivery time of supplies.

25 47. The method of claim 42, further comprising automatically preparing a supply order when additional supplies are required.

48. The method of claim 47, further comprising automatically submitting the supply order requesting supplies.

49. The method of claim 21, wherein the system productivity values comprise an estimated product sales price.

50. The method of claim 49, wherein the estimated sales price is derived as a function of expected costs and a user-specified profit margin.

51. The method of claim 21, wherein the system productivity values comprise an estimated product cost of production.

52. The method of claim 51, wherein the estimated cost of production is derived as a function of historical labor and material values.

53. The method of claim 21, wherein determining system productivity values further comprising calculating an average number of delivery days for one or components.

54. The method of claim 21, wherein the data collected comprises the total revenue generated from a sale of one or more product items.

55. The method of claim 21, wherein the data collected comprises an order history of one or more customers.

56. The method of claim 21, wherein the data is from real-time product or service output and worker productivity for a business in which products and services are produced at least partly serially.

57. A system for monitoring productivity comprising:

a computer processor;

an input device;

a display; and

a memory accessible by the computer processor, the memory containing stored

programming instructions that instruct the processor to

(a) collect data from a plurality of production sources;

- (b) store the data in one or more databases; and
- (c) determine system productivity values.

58. The system of claim 57, wherein the collected data comprises worker productivity data.

5 59. The system of claim 58, wherein the collected data comprises material usage and cost data.

60. The system of claim 59, wherein the collected data comprises foreign currency exchange data.

61. The system of claim 60, wherein the collected data comprises customer data.

10 62. The system of claim 61, wherein the collected data comprises user-specified parameters.

63. The system of claim 62, wherein the user-specified parameters comprise one or more of target profit margin, labor cost, delivery safety margin, overhead expense, salary incentives, and hidden cost corrections.

15 64. The system of claim 62, wherein the user-specified parameters comprise target profit margin, labor cost, delivery safety margin, overhead expense, salary incentives, and hidden cost corrections.

65. The system of claim 57, wherein the system productivity values comprise worker efficiency.

20 66. The system of claim 57, wherein the system productivity values comprise average worker efficiency.

67. The system of claim 57, wherein the system productivity values comprise total cost to produce a product.

25 68. The system of claim 57, wherein the system productivity values comprise rate of supply usage.

69. The system of claim 57, wherein the system productivity values comprise rate of supply waste.

70. The system of claim 57, wherein the system productivity values comprise an average delivery time of supplies.

5 71. The system of claim 57, wherein the system productivity values comprise worker incentives.

72. The system of claim 57, wherein the stored programming instructions further instruct the processor to monitor supply usage.

10 73. The system of claim 72, wherein monitoring supply usage further comprises determining average daily usage of supplies.

74. The system of claim 72, wherein monitoring supply usage further comprises determining the minimum quantity of supplies required before additional orders are required.

75. The system of claim 72, wherein monitoring supply usage further comprises determining the quantity of wasted supplies.

15 76. The system of claim 72, wherein monitoring supply usage further comprises automatically determining when to order additional supplies.

77. The system of claim 72, wherein monitoring supply usage further comprises preparing a supply order as a function of an average delivery time of supplies.

20 78. The system of claim 72, wherein monitoring supply usage further comprises automatically ordering additional supplies when required.

79. The system of claim 57, wherein the system productivity values comprise a comparison of actual productivity with worker-specified productivity.

25 80. A system for monitoring productivity comprising:  
a server having an associated memory for storing collected productivity data and  
application software stored on the associated memory that causes the server to  
determine productivity values;

a remote client capable of communicating with the server over a network; and  
a memory associated with the remote client and containing stored program  
instructions that cause remote client to display the data.

81. The system of claim 80, wherein the collected data comprises worker productivity  
data.

82. The system of claim 81, wherein the collected data comprises material usage and  
cost data.

83. The system of claim 82, wherein the collected data comprises foreign currency  
exchange data.

84. The system of claim 83, wherein the collected data comprises customer data.

85. The system of claim 84, wherein the collected data comprises user-specified  
parameters.

86. The system of claim 85, wherein the user-specified parameters comprise one or  
more of target profit margin, labor cost, delivery safety margin, overhead expense, salary  
incentives, and hidden cost corrections.

87. The system of claim 85, wherein the user-specified parameters comprise target  
profit margin, labor cost, delivery safety margin, overhead expense, salary incentives, and  
hidden cost corrections.

88. The system of claim 80, wherein the system productivity values comprise worker  
efficiency.

89. The system of claim 80, wherein the system productivity values comprise average  
worker efficiency.

90. The system of claim 80, wherein the system productivity values comprise total cost  
to produce a product.

91. The system of claim 80, wherein the system productivity values comprise rate of  
supply usage.



92. The system of claim 80, wherein the system productivity values comprise rate of supply waste.

93. The system of claim 80, wherein the system productivity values comprise an average delivery time of supplies.

5 94. The system of claim 80, wherein the system productivity values comprise worker incentives.

95. The system of claim 80, wherein the stored programming instructions further instruct the processor to monitor supply usage.

10 96. The system of claim 95, wherein monitoring supply usage further comprises determining average daily usage of supplies.

97. The system of claim 95, wherein monitoring supply usage further comprises determining the minimum quantity of supplies required before additional orders are required.

98. The system of claim 95, wherein monitoring supply usage further comprises determining the quantity of wasted supplies.

15 99. The system of claim 95, wherein monitoring supply usage further comprises automatically determining when to order additional supplies.

100. The system of claim 95, wherein monitoring supply usage further comprises preparing a supply order as a function of an average delivery time of supplies.

20 101. The system of claim 95, wherein monitoring supply usage further comprises automatically ordering additional supplies when required.

102. The system of claim 80, wherein the system productivity values comprise a comparison of actual productivity with worker-specified productivity.